# **MA2Z7850G**

## Silicon epitaxial planar type

For super high speed switching For small current rectification

#### ■ Features

- High-density mounting is possible
- Forward current (Average) I<sub>F(AV)</sub> = 100 mA rectification is possible
- Optimum for high frequency rectification because of its short reverse recovery time t<sub>rr</sub>
- Low forward voltage V<sub>F</sub> and good rectification efficiency
- Reverse voltage  $V_R = 50 \text{ V}$  is guaranteed

#### Package

- Code
  - SMini2-F3
- Pin Name
  - 1: Anode
  - 2: Cathode
- Marking Symbol: 2E

### ■ Absolute Maximum Ratings T<sub>a</sub> = 25°C

Parameter	Symbol	Rating	Unit
Reverse voltage	V <sub>R</sub>	50	V
Repetitive peak reverse voltage	V <sub>RRM</sub>	50	V
Forward current (Average)	I <sub>F(AV)</sub>	100	mA
Peak forward current	$I_{FM}$	300	mA
Non-repetitive peak forward surge current *	$I_{FSM}$	1	A
Junction temperature	Tj	125	°C
Storage temperature	T <sub>stg</sub>	-55 to +125	°C

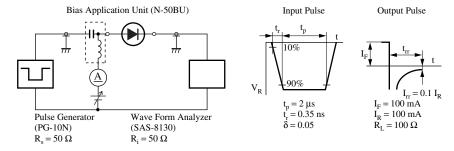
Note) \*: The peak-to-peak value in one cycle of 50 Hz sine wave (non-repetitive)

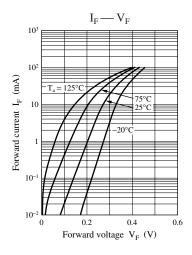
### ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

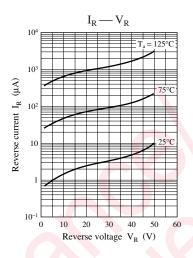
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	$V_{\rm F}$	I <sub>F</sub> = 100 mA	09,		0.55	V
Reverse current	$I_R$	$V_R = 50 \text{ V}$			30	μΑ
Terminal capacitance	C <sub>t</sub>	$V_R = 0 V, f = 1 MHz$		25		pF
Reverse recovery time *	t <sub>rr</sub>	$I_F = I_R = 100 \text{ mA}$		3.0		ns
* C		$I_{rr} = 0.1 I_R, R_L = 100 \Omega$				

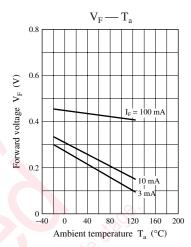
- Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
  - This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
  - 3. Absolute frequency of input and output is 200 MHz.

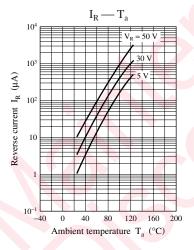
4. \*: t<sub>rr</sub> measurement circuit

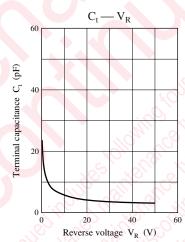


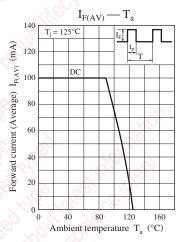




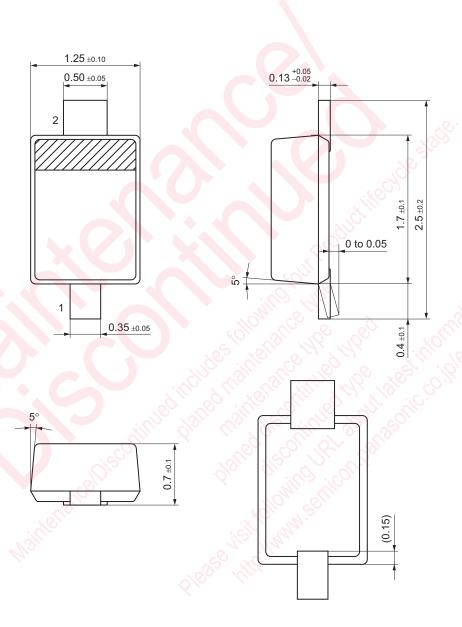








SMini2-F3 Unit: mm



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